



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,886	11/26/2003	Thomas M. Laney	86688CPK	1675

7590 09/15/2009
Paul A. Leipold
Patent Legal Staff
Eastman Kodak Company
343 State Street
Rochester, NY 14650-2201

EXAMINER

SCHWARTZ, PAMELA R

ART UNIT	PAPER NUMBER
----------	--------------

1794

MAIL DATE	DELIVERY MODE
-----------	---------------

09/15/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte THOMAS M. LANEY, PETER T. AYLWARD,
SANDRA J. DAGAN, BRUCE C. CAMPBELL and
KENNETH W. BEST, JR.

Appeal 2009-011235
Application 10/722,886
Technology Center 1700

Decided: September 14, 2009

Before TERRY J. OWENS, JEFFREY T. SMITH and
BEVERLY A. FRANKLIN, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL
STATEMENT OF THE CASE

The Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1, 3-15, 21 and 39-42. Claims 16-20 and 36-38, which are all of the other pending claims, have been withdrawn from consideration by the Examiner. We have jurisdiction under 35 U.S.C. § 6(b).

The Invention

The Appellants claim an inkjet recording element. Claim 1 is illustrative:

1. An inkjet recording element comprising a permeable microvoided layer comprising a polylactic-acid-based material, in a continuous phase, and interconnecting voids enabling capillary action, for an ink adsorption rate resulting in a dry time of less than 10 seconds, the microvoids occupying from 40 to 65 percent by volume of the microvoided layer.

The Reference

Morita EP 0 510 998 A2 Oct. 28, 1992

The Rejections

The claims stand rejected over Morita as follows: claims 1, 3-15 and 39-42 under 35 U.S.C. § 102(b), and claims 1, 3-15, 21 and 39-42 under 35 U.S.C. § 103.¹

OPINION

We reverse the rejection under 35 U.S.C. § 102(b) and affirm the rejection under 35 U.S.C. § 103.

¹ The Examiner omits claims 41 and 42 from the statements of the rejections in the Examiner's Answer (Ans. 3-4) (The pages of the Examiner's Answer are not numbered. The page numbers cited to herein have been provided by the Board). Because the Examiner addresses claims 41 and 42 (Ans. 8-9), we consider the omission of those claims from the statements of the rejections to be inadvertent. Hence, we consider the rejections of claims 41 and 42 to be before us.

Rejection under 35 U.S.C. § 102(b)

Issue

Have the Appellants shown reversible error in the Examiner's determination that Morita discloses, expressly or inherently, an inkjet recording element comprising a permeable microvoided layer that comprises a polylactic acid-based material and has the properties required by the Appellants' claims?

Findings of Fact

Morita discloses a porous film that "has high moisture permeability and breathability and is also excellent in flexibility, and is hence suitable for uses such as leak-proof films for a disposable paper diaper and other sanitary materials, packaging materials and filter media" (p. 2, ll. 4-6). The porous film is made by adding "from 40 to 250 parts by weight of a finely-powdered filler having an average particle size of from 0.3 to 4 μm to 100 parts by weight of a polylactic acid-base[d] resin composition comprising from 80 to 100 % by weight of polylactic acid or a lactic acid-hydroxycarboxylic acid copolymer and from 0 to 20 % by weight of a plasticizer, melting and film-forming the resultant mixture, and successively stretching the thus-obtained film 1.1 times or more to at least one direction of the axis" (p. 2, ll. 40-45). The stretching is "preferably from 1.1 to 7 times at least to one direction of axis. Stretching can be carried out in multi-steps or conducted biaxially" (p. 5, ll. 27-28). "Thickness of the porous film differs depending upon uses and is generally in the range of from 10 to 300 μm " (p. 5, ll. 34-35).

Analysis

“Anticipation requires that every limitation of the claim in issue be disclosed, either expressly or under principles of inherency, in a single prior art reference.” *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1255-56 (Fed. Cir. 1989).

The Appellants argue that “the relevant issue to anticipation is whether all of the instantly claimed properties inherently result from practice of the prior art” (Br. 3) and that “[n]o evidence or explanation of the alleged anticipation is provided in this rejection” (Br. 4).

The Examiner argues that “[b]ecause there is significant overlap in the particle size range, weight percentages of filler (which serve as void initiators), filler materials and polymer composition, and because the stretching ratios of the reference encompass those instantly claimed, the instantly claimed properties inherently result from practice of the prior art within its disclosed ranges” (Ans. 3-4).

For the Appellants’ claimed invention to be anticipated, the reference must lead one of ordinary skill in the art to a product which falls within the scope of the claim “without any need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference.” *In re Arkley*, 455 F.2d 586, 587 (CCPA 1972).

The Examiner has not established that an inkjet recording element having the properties required by the Appellants’ claims can be obtained without picking choosing values from Morita’s ranges that fall within the Appellants’ ranges. Hence, the Examiner has not established that Morita anticipates the Appellants’ claimed invention.

Conclusion of Law

The Appellants have shown reversible error in the Examiner's determination that Morita discloses, expressly or inherently, an inkjet recording element comprising a permeable microvoided layer that comprises a polylactic acid-based material and has the properties required by the Appellants' claims.

Rejection under 35 U.S.C. § 103

Issue

Have the Appellants shown reversible error in the Examiner's determination that Morita would have rendered prima facie obvious, to one of ordinary skill in the art, an inkjet recording element comprising a permeable microvoided layer that comprises a polylactic acid-based material and has the properties required by the Appellants' claims?

Analysis

The Appellants argue that in Morita "there is no teaching that an inkjet recording element could be obtained or how to obtain it" (Br. 6).

Morita's polylactic acid-based porous film can have the thickness, inorganic particle size and loading, and degree of stretching of the Appellants' permeable microvoided layer and, therefore, like the Appellants' permeable microvoided layer, can be suitable for use as an inkjet recording element. The Appellants state that the thickness of their polylactic acid layer is 30 to 400 μm , and that a thickness of at least 28.0 μm is needed to achieve a total absorbancy of 14 cc/m^2 (claim 3) (Spec. 10:12-17). Morita's polylactic acid-based porous film thickness is 10 to 300 μm (p. 5, ll. 34-35), which overlaps the Appellants' range. The Appellants state that the particle size of their void initiator inorganic particles is about 0.1 to about 50 μm

(Spec. 11:19-20). Morita's void initiator inorganic particles have an average particle size of 0.3 to 4 μm (p. 4, l. 58), which is within the Appellants' range. The Appellants state that their void initiator inorganic particles comprise from about 45 to about 75 wt% of the total microvoided layer (Spec. 12:28-31). Morita's void initiator inorganic particles are present in an amount of 40 to 250 parts by weight per 100 parts by weight of the polylactic acid-based resin composition (29 to 71 wt%) (p. 5, ll. 10-11), which overlaps the Appellants' range. The Appellants' biaxial draw ratio of the molten polylactic acid-based resin film is 2 to 5 times (Spec. 12:18-19). Morita's preferred biaxial draw ratio is 1.1 to 7 times (p. 5, ll. 27-28), which encompasses the Appellants' range.

The Appellants argue that Morita fails to obtain the Appellants' open-celled film and that "the materials made by Morita et al. would not be useful in an inkjet recording element because it would not allow the necessary passage of the liquid ink through the material" (Br. 9).

Morita's disclosure that if the amount of void initiator inorganic particles is less than 40 parts by weight per 100 parts by weight of the polylactic acid-based resin composition, there is insufficient porosity and a low percentage of open cells (p. 5, ll. 11-12), indicates when the inorganic particle loading is higher there is a higher percentage of open cells. Thus, it appears that when Morita's film has an inorganic particle loading within the Appellants' 45 to about 75 wt% range (Spec. 12:28-31), the film has sufficient open cells to allow the passage of ink necessary for the porous film to be useful as an inkjet recording element.

The Appellants rely (Br. 8) upon a Declaration under 37 C.F.R. § 1.132 by Thomas M. Laney, filed May 11, 2006, which states

“that only at inorganic loadings above 60% by weight and with biaxial stretch ratios of greater than 3.0 X 3.0 can significantly absorptive films be attained with polylactic acid” (Decl. 2).

Morita discloses that the porous film can have an inorganic loading of 250 parts by weight per 100 parts by weight of the polylactic acid-based resin composition, which is 71 wt%, and has a preferred biaxial stretch ratio of 1.1 to 7 times, which includes values greater than 3.0 (p. 5, ll. 10-11, 27-28). Hence, in view of the Laney Declaration, it appears that Morita’s porous film can be significantly absorptive.

The Appellants argue that Morita does not disclose the Appellants’ required absorbent capacity (claim 3), void initiator amount (claims 39 and 40) and degree of biaxial stretching (claims 39-42) (Br. 10-11).

As indicated above, Morita would have led one of ordinary skill in the art, through no more than ordinary creativity, to a film having the high inorganic particle loading and high biaxial stretching and, accordingly, the absorbency, required by those claims. *See KSR Int’l. Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (In making an obviousness determination one “can take account of the inferences and creative steps that a person of ordinary skill in the art would employ”).

For a prima facie case of obviousness to be established, the applied prior art need not recognize a particular advantage recognized by the Appellants. *See Ex parte Obiaya*, 227 USPQ 58, 60 (BPAI 1985) (“The fact that appellant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious”). The Appellants’ recognition that Morita’s porous films that have high inorganic

particle loadings and high biaxial stretching have the advantage of being suitable for use as an inkjet recording medium does not render those porous films patentable.

Conclusion of Law

The Appellants have not shown reversible error in the Examiner's determination that Morita would have rendered prima facie obvious, to one of ordinary skill in the art, an inkjet recording element comprising a permeable microvoided layer that comprises a polylactic acid-based material and has the properties required by the Appellants' claims.

DECISION/ORDER

The rejection of claims 1, 3-15 and 39-42 under 35 U.S.C. § 102(b) over Morita is reversed. The rejection of claims 1, 3-15, 21 and 39-42 under 35 U.S.C. § 103 over Morita is affirmed.

It is ordered that the Examiner's decision is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

tc
PAUL A. LEIPOLD
PATENT LEGAL STAFF
EASTMAN KODAK COMPANY
343 STATE STREET
ROCHESTER, NY 14650-2201